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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,275	03/19/2004	Jon Christopher Connelly	100200514-1	7427

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
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2113

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/804,275	<b>Applicant(s)</b> CONNELLY ET AL.	
	<b>Examiner</b> Joseph D. Manoskey	<b>Art Unit</b> 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9-14,16-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9-14,16-21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-7, 9-13, 17-21, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller, U.S. Patent 6,742,141.

3. Referring to claim 1, Miller teaches a method for analyzing the root cause of system failures on one or more computers, comprising: generating an event when a computer system detects a system failure (column 12 lines 53-55); determining the cause of the system failure (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found); transmitting the event, including the determined cause, from the computer system to a central repository (column 13 lines 27-32); and analyzing the system failure event in the central repository (column 13 lines 27- 32).

Miller also teaches storing the event in a local repository located on the computer system (column 13 lines 23-32). Miller discloses synchronizing the local repository and the central repository, wherein the synchronizing step comprises: transmitting missing events in the central repository from the computer system (column 19 lines 40-42, lines 57-58: additional support may be used if a solution to an event cannot be found; column 19 line 64 - column 20 line 18: a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base). Miller teaches the customer site adding information to a log and this log then being saved in a new entry in master knowledge base, thus being transmitted from the customer site, "local repository on the computer system", to the central facility, "central repository" (See Miller, Col. 20, lines 7-17).

4. Referring to claim 5, Miller teaches determining if the system failure was due to a hardware problem by analyzing a file log (column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-42, hardware logs are stored).

5. Referring to claim 6, Miller discloses determining if the system failure was due to a software problem by analyzing system core files (column 9 lines 39-43: registry files are monitored).

6. Referring to claim 7, Miller discloses assigning a sequence number to each event generated (column 17 lines 27-40); receiving a status request from the central

repository (column 17 lines 39-40); and synchronizing the local repository and the central repository if the sequence number does not match the expected sequence number (column 17 lines 40-54).

7. Referring to claim 9, Miller teaches wherein the synchronizing step further comprises: transmitting missing events in the local repository from the central repository (column 18 lines 5-10).

8. Referring to claim 10, Miller discloses wherein the synchronizing step further comprises: discarding events that have already been received (column 18 lines 5-10). Miller teaches using just the incremental update, thus not using events already received.

9. Referring to claim 11, Miller teaches retransmitting the information stored in the central repository to another computer system for further analysis (column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

10. Referring to claim 12, Miller teaches an apparatus for analyzing the root cause of system failures on one or more computers, comprising: a network (figure 7 item 122); a local support computer coupled to said network (figure 7 item 120); and a computer system coupled to the network (figure 7 item 124), said computer system programmed

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to monitor itself and another computer system for system failures (column 4 lines 12-27), to determine the cause of the system failure, and to transmit system failure events to said local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found).

Miller also teaches storing the event in a local repository located on the computer system (column 13 lines 23-32). Miller discloses synchronizing the local repository and the central repository, wherein the synchronizing step comprises: transmitting missing events in the central repository from the computer system (column 19 lines 40-42, lines 57-58: additional support may be used if a solution to an event cannot be found; column 19 line 64 - column 20 line 18: a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base). Miller teaches the customer site adding information to a log and this log then being saved in a new entry in master knowledge base, thus being transmitted from the customer site, "local repository on the computer system", to the central facility, "central repository" (See Miller, Col. 20, lines 7-17).

11. Referring to claim 13, Miller discloses the local support computer programmed to collect and analyze the system failure information (column 13 lines 27-32).

12. Referring to claim 17, Miller teaches the computer system programmed to determine if the system failure was due to a hardware problem by analyzing a file log

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(column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-42, hardware logs are stored).

13. Referring to claim 18, Miller discloses the computer system programmed to determine if the system failure was due to a software problem by analyzing system core files (column 9 lines 39-43: registry files are monitored).

14. Referring to claim 19, Miller teaches the computer system programmed to assign a sequence number to each event generated (column 17 lines 27-40); the local support computer programmed to send a status request to the computer system (column 17 lines 39-40), and to synchronize the local repository with the local support computer if the sequence number does not match the expected sequence number (column 17 lines 40-54).

15. Referring to claim 20, Miller discloses a remote support computer connectable to the local support computer for receiving system failure data from said local support computer (column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

16. Referring to claim 21, Miller discloses a means for analyzing the root cause of system failures on one or more computers, comprising: a means for transmitting data from one computer to another (figure 7 item 122), a local support computer coupled to

said means for transmitting data (figure 7 item 120), a computer system coupled to said means for transmitting data (figure 7 item 124), a means for said computer system to monitor itself or another computer system (column 4 lines 12-27), for system failures and determining the causes of said failures, a means for transmitting the causes of said failures to the local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found).

Miller also teaches storing the event in a local repository located on the computer system for storing the event (column 13 lines 23-32). Miller discloses means for synchronizing the local repository and a repository of the local support computer, wherein the synchronizing step comprises: a means for transmitting missing events in the central repository from the computer system (column 19 lines 40-42, lines 57-58: additional support may be used if a solution to an event cannot be found; column 19 line 64 - column 20 line 18: a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base). Miller teaches the customer site adding information to a log and this log then being saved in a new entry in master knowledge base, thus being transmitted from the customer site, "local repository on the computer system", to the central facility, "repository of the local support computer" (See Miller, Col. 20, lines 7-17).

17. Referring to claims 23, 24, and 25, Miller teaches wherein the missing events correspond to system failure events for which causes were still being determined by the



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computer system at a time when the central repository made a request for event information to be sent thereto, and for which the causes have subsequently been determined by the computer system (See Miller, Col. 20, lines 3-17). Miller teaches the customer site sending the log to the technician at the master knowledge base and when the session is finished then the log is saved.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 2, 4, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Null (Null, Linda: The Essentials of Computer Organization and Architecture. © 2003 Jones and Bartlett).

20. Referring to claim 2, Miller teaches all the limitations (See rejection of claim 1) except re-transmitting the event if a receipt confirmation message is not received from the central repository. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8,

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page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

21. Referring to claim 4, Miller discloses all the limitations (See rejection of claim 1) except holding the event in a queue if a receipt confirmation message is not received from the central repository; and re-transmitting the event in the queue after a period of time. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered

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reliable, will periodically lose packets at some point in the data transmission process.

Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

22. Referring to claim 14, Miller teaches all the limitations (See rejection of claim 12 ) except the computer system programmed to re-transmit the event if a receipt confirmation message is not received from the local support computer. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have

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been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.<sup>9</sup>

23. Referring to claim 16, Miller teaches all the limitations (See rejection of claim 12) except the computer system programmed to hold the event in a queue if a receipt confirmation message is not received from the central repository, and to re-transmit the event in the queue after a period of time. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections~ though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

***Response to Arguments***

24. Applicant's arguments, see page 7 of amendment, filed 19 December 2006, with respect to claims 7,8, and 10 have been fully considered and are persuasive. The objection of claims 7,8 and 10 has been withdrawn.

25. Applicant's arguments, see pages 7-9 of amendment, filed 19 December 2006 have been fully considered but they are not persuasive.

26. Referring to claims 1, 12, 21, Applicant argues that Miller does not teach "transmitting missing events in the central repository from the computer system. The Examiner respectfully disagrees. Miller teaches the customer site adding information to a log and this log then being saved in a new entry in master knowledge base, thus being transmitted from the customer site, "local repository on the computer system", to the central facility, "central repository" (See Miller, Col. 20, lines 7-17).

27. Referring to claim 10, Applicant argues that Miller does not teach wherein the synchronizing step further comprises: discarding events that have already been received. The Examiner respectfully disagrees. Miller teaches using just the incremental update, thus not using events already received (column 18 lines 5-10).

### ***Conclusion***

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Manoskey whose telephone number is (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDM  
March 18, 2007

  
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